CT - TRCC

Safety Data System

Traffic Records System Inventory

A formal traffic records system inventory includes all traffic records data sources, system custodians, data elements and attributes, linkage variables, linkages useful to the State, and data access policies.

The formal system documentation required in a traffic records system inventory permits the identification of common variables and provides an understanding of data quality that may affect linkage processes.

Highway traffic safety decision-makers use data to develop and evaluate engineering, enforcement, education, and emergency medical services safety countermeasures. The highway safety office manages programs related to road users' behavior. These programs may address topics including: occupant protection, impaired driving, older drivers, and pedestrian safety. Program managers use data and analyses to identify problems, determine priorities, allocate resources, and evaluate program effectiveness. More comprehensive behavioral safety analyses often require integrated datasets.

Data integration refers to the establishment of connections between the six major traffic records system components (driver, vehicle, roadway, crash, citation/adjudication, and injury surveillance). The resulting integrated datasets enable users to conduct analyses and generate insights impossible to achieve if based solely on the contents of any singular data system.

Data governance is the formal management of the State's data assets. Governance includes a set of documented processes, policies, and procedures that are critically important to integrate traffic records data. These policies and procedures address and document data definitions, content, and management of key traffic records data sources within the State.

Module Name	Contact			
Crash Data System	Kerry Ross			
Citation Data System	Stacey Manware			
Roadway Data System	Al Iallonardo			
Injury Surveillance System	Ann Kloter			
Driver Data System	George White			
Vehicle Data System	George White			

CT - TRCC

Safety Data System

Crash Data System

The crash system is the keystone of the State's traffic records system. The crash system not only holds the basic data critical to developing and deploying effective traffic safety countermeasures, it frequently also serves as the hub through which other systems are connected.

The benefits and overall utility derived from the other traffic records systems are significantly enhanced by reliable, valid statewide crash data. Linking other systems' data with crash data enables invaluable opportunities for analysis. The resulting information drives State highway safety and injury prevention programs and has widespread applicability for all levels of government, industry, research groups, lawmakers, healthcare providers and the public.

The crash system documents the characteristics of a crash and provides the **who, what, when, where, how,** and **why**. Ideally, crash data reflecting all levels of severity (including fatal, injury, and property damage only) is collected and used to support safety analysis.

Through linkages to other traffic records system components, the crash data system identifies the roadways, vehicles, and individuals (e.g., drivers, occupants, non-motorists) involved in a crash. Data and analytic tools are broadly available so safety stakeholders can identify locations, roadway features, behaviors, driver characteristics, and vehicle characteristics that relate to crash risk.

Connecticut	
Contact:	Kerry Ross
Title:	Transportation Supervising Planner
Agency:	ConnDOT
Office:	Crash Data and Analysis Section
Address:	2800 Berlin Turnpike, Newington, CT
Phone:	860-594-2087
Email:	Kerry.Ross@ct.gov
Questions – Crash Data	
• Is statewide crash data consolidated into one database?	
• Is the statewide crash system's organizational custodian clearly defined?	
• Does the State have fatal crash reporting criteria?	
• Does the State have injury crash reporting criteria?	
• Does the State have PDO crash reporting criteria?	
• Does the statewide crash system record crashes occurring in non-traffic way areas (e.g., parking lots, driveways)?	

Crash Data System (continued)

- Is data from the crash system used to identify crash risk factors?
- Is data from the crash system used to guide engineering and construction projects?
- Is data from the crash system regularly used to prioritize law enforcement activity?
- Is data from the crash system used to evaluate safety countermeasure programs?

Questions – Crash Reporting Guidelines and Standards

- Is the MMUCC Guideline a primary source for identifying what crash data elements and attributes the State collects?
- Is the D16.1 Crash Classification Manual used as a source for the definitions in the crash system data dictionary?

Questions – Data Dictionary for the Crash Data System

- Does the data dictionary provide a definition for each data element and define that data element's allowable values?
- Does the data dictionary document the system edit checks and validation rules?
- Is the data dictionary up to date and consistent with the field data collection, coding manual, crash report, and any training materials?
- Does the crash system data dictionary indicate the data elements populated through links to other traffic records system components?

Questions – Procedures and Process Flows for Crash Data Systems

- Do all law enforcement agencies collect crash data in the field?
- Do all law enforcement agencies collecting crash data electronically in the field also submit the data to the statewide crash system electronically?
- Do all law enforcement agencies collecting crash data electronically in the field apply validation rules consistent with those in the statewide crash system prior to submission?
- Does the State maintain accurate and up-to-date documentation detailing the policies and procedures for key processes governing the collection, reporting, and posting of crash data – including the submission of fatal crash data to the State FARS unit and commercial vehicle crash data to SafetyNet?
- Are the processes for managing errors and incomplete data documented?
- Do the document retention and archival storage policies meet the needs of safety engineers and other users with a legitimate need for long-term access to the crash data reports?

Questions – Crash Data Systems Interface with Other Components

- Does the crash system interface with the (driver, vehicle, roadway, citation/adjudication, injury surveillance) system(s)?

Questions – Data Quality Control Programs for the Crash System

- Are there automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements?
- etc. (sixteen additional questions)

CT - TRCC

Safety Data System

Citation and Adjudication Systems

The citation and adjudication data systems, while independent, are different and represent separate State agencies (extending through separate branches of government) and all levels of governance. Responsibility for the systems is shared among various data-owning agencies – from local to State – and a willingness to share appropriate data is necessary to support core business practices although each of the agencies remain independent. When regarded together, State citation and adjudication systems provide information about citations, arrests and dispositions.

The ideal citation system contains a process grounded in a unique citation number assigned by a statewide authority and used by all law enforcement agencies. The law enforcement officer issues the citation and copies are provided to the statewide licensing agency, the appropriate (State or local) prosecutor and/or courts, and the individual. Citations are often disposed of outside of the courts or judicial branch. Citations that are adjudicated are subject to a variety of processes. Ideally, the record should reflect the processes that resulted in the disposition of the case.

Connecticut	
Contact:	Stacey Manware
Title:	Deputy Director, Superior Court Operations
Agency:	Judicial Branch
Office:	Central Infractions Bureau
Address:	
Phone:	860-263-2752
Email:	Stacey.Manware@ct.gov
Questions – Description and Contents of the Citation and Adjudication Data Systems	
• Is there a statewide system that provides real-time information on individuals' driving and criminal histories?	
• Do all law enforcement agencies, parole agencies, probation agencies, and courts within the State participate in and have access to a system providing real-time information on individuals driving and criminal histories?	
• Is there a statewide authority that assigns unique citation numbers?	
• Are all citation dispositions – both within and outside the Judicial Branch – tracked by the statewide data system?	
• - Are final dispositions (up to and including the resolution of any appeals) posted to the driver data system?	
• Are the courts' case management systems interoperable among all jurisdictions within the State (including local, municipal, and State)?	

Citation and Adjudication System (continued)
• Is citation and adjudication data used for traffic safety analysis to identify problem locations, areas, problem drivers, and issues related to the issuance of citations, prosecution of offenders, and adjudication of cases by courts?
Questions – Applicable Guidelines for the Citation and Adjudication Systems
• Do the appropriate components of the citation and adjudication systems adhere to the National Crime Information Center data guidelines?
• Do the appropriate portions of the citation and adjudication systems adhere to the Uniform Crime Reporting Program guidelines?
• Do the appropriate portions of the citation and adjudication systems adhere to the National Incident-Based Reporting System guidelines?
• etc. (seven additional questions)
Questions – Data Dictionary for the Citation and Adjudication Data Systems
• Does the citation system have a data dictionary?
• Do the citation data dictionaries clearly define all data fields?
• Are the citation system data dictionaries up-to-date and consistent with the field data collection manual, training materials, coding manuals, and corresponding reports?
• etc. (five additional questions)
Questions – Procedures and Process Flows for the Citation and Adjudication Data Systems
• Can the State track citations from point of issuance to posting on the driver file?
• Does the State measure compliance with the process outlined in the citation lifecycle flow chart?
• Is the State able to track DUI citations?
• Does the DUI tracking system include BAC and any drug testing results?
• Does the State have a system for tracking administrative driver penalties and sanctions?
• etc. (six additional questions)
Questions – Citation and Adjudication Systems Interface with Other Components
• Is citation data linked with the driver system to collect driver information, to carry out administrative actions (e.g., suspension, revocation, cancellation, interlock) and determine the applicable charges?
• Is adjudication data linked with the driver system to collect certified driver records and administrative actions (e.g., suspension, revocation, cancellation, interlock) to determine the applicable charges and to post the dispositions to the driver file?
• Is citation data linked with the vehicle file to collect vehicle information and carry out administrative actions (e.g., vehicle seizure, forfeiture, interlock)?
• etc. (three additional questions)
Questions – Quality Control Programs for the Citation and Adjudication Systems
• Twelve questions pertaining to quality control

Roadway Data System

The State's roadway data system comprises data collected by the State (State-maintained roadways and, in some cases, local roadways) as well as data from local sources such as county and municipal public works agencies and metropolitan planning organizations. The ideal statewide system incorporates sufficient information on all public roads to support valid, system-wide network screening and countermeasure development, deployment, and evaluation.

There are currently no requirements for the collection of roadway inventory information for safety purposes.

Connecticut	
Contact:	Al Iallonardo
Title:	
Agency:	ConnDOT
Office:	
Address:	
Phone:	
Email:	Al.Iallonardo@ct.gov
Questions – Description and Contents of the Roadway Data System	
• Are all public roadways within the State located using a compatible location referencing system?	
• Are the roadway and traffic data elements located using a compatible location referencing system (e.g., LRS, GIS)?	
• Is there an enterprise roadway information system containing roadway and traffic data elements for all public roads?	
• Does the State have the ability to identify crash locations using a referencing system compatible with the one(s) used for roadways?	
• Is crash data incorporated into the enterprise roadway information system for safety analysis and management use?	
Questions – Applicable Guidelines for the Roadway Data System	
•	
•	
Questions – Data Dictionary for the Roadway Data System	
•	
•	
•	

CT - TRCC

Safety Data System

Injury Surveillance System

The development of a statewide injury surveillance system (ISS) is driven by local, State and Federal programs within the traffic safety, public health, and law enforcement communities. These surveillance systems typically incorporate pre-hospital emergency medical services (EMS), trauma registry, emergency department, hospital discharge, rehabilitation databases, payer-related databases, and mortality data (e.g., death certificates, autopsies, and coroner and medical examiner reports). The data from these different systems are used to track injury type, causation, severity, cost, and outcome.

Other traffic records system components provide the ISS with supplementary information regarding the crash, vehicle, occupant, and environmental characteristics. The custodial responsibility for the various files and databases within the ISS is typically distributed among several State agencies and other entities.

Ideally, the ISS tracks the frequency, severity, and nature of injuries sustained in motor vehicle crashes; enables the integration of injury data with the crash data; and makes this information available for analysis that supports research, prevention, problem identification, policy-level decision-making, and efficient resource allocation. Common sectors within the stakeholder community include traffic safety, health care, injury prevention, research, and the interested public.

Connecticut	
Contact:	Ann Kloter
Title:	Epidemiologist
Agency:	DPH
Office:	OEMS
Address:	
Phone:	860-509-7431
Email:	Ann.Kloter@ct.gov
Questions – Description and Contents of the Injury Surveillance System	
• Does the injury surveillance system (ISS) include EMS data?	
• Does the ISS include emergency department, hospital discharge, trauma registry, rehabilitation, vital records, and other data types?	
Questions – Applicable Guidelines for the Injury Surveillance System	

CT - TRCC

Safety Data System

Driver Data System

The driver data system ensures that each person licensed to drive has one identity, once license to drive, and one record. Custodial responsibility for the driver system resides in a single location, generally the State Department of Motor Vehicles.

Ideally, the driver system maintains information on all out-of-State or unlicensed drivers convicted of traffic violations within the State's boundaries. At a minimum, the driver system maintains driver identities, histories, and licensing information for all records in the system. While the structure of the driver system is typically oriented towards individual drivers, the system is also designed to support (in concert with other data systems) both aggregate and detailed analysis of driver behaviors as they relate to safety.

At a minimum, the driver system should be linked to the crash data system, the DUI data system, and the citation and adjudication systems (for both original charges and the final dispositions of all traffic citations).

Connecticut	
Contact:	George White
Title:	Division Chief
Agency:	DMV
Office:	
Address:	
Phone:	860-263-5449
Email:	George.White@ct.gov
Questions – Description and Contents of the Driver Data System	
• Does custodial responsibility for the driver system – including commercially-licensed drivers – reside in a single location?	
• Can the State's DUI system be linked electronically to the driver system?	
Questions – Applicable Guidelines for the Driver Data System	
• Is driver information maintained in a manner that accommodates interaction with the National Driver Register's PDPS and the CDLIS?	
Questions – Data Dictionary for the Driver Data System	
•	

CT - TRCC

Safety Data System

Vehicle Data System

The vehicle system is an inventory of data that enables the titling and registration of each vehicle under the State's jurisdiction to ensure that a descriptive record is maintained and made accessible for each vehicle and owner operating on public roadways.

Vehicle information includes identification and ownership data for vehicles registered in the State and out-of-State vehicles involved in crashes within the State's boundaries. Information on vehicle make, model, year of manufacture, body type (usually extracted from the VIN), and adverse vehicle history (title brands) is maintained in order to produce the data needed to support safety programs. Ideally, the vehicle system is capable of recording and reporting title data, registration information, and verification of required insurance and should clearly define both the vehicle itself and the owner or leaseholder.

Custodial responsibility for vehicle data usually resides in a State's Department of Motor Vehicles. The structure of vehicle databases is typically oriented to individual "customers". While some commercial vehicle-related functions are handled separately, such information should still be accessible via the primary vehicle data system.

Connecticut	
Contact:	George White
Title:	Division Chief
Agency:	DMV
Office:	
Address:	
Phone:	860-263-5449
Email:	George.White@ct.gov
Questions – Description and Contents of the Vehicle Data System	
• Does custodial responsibility of the identification and ownership of vehicles registered in the State – including vehicle make, model, year of manufacture, body type, and adverse vehicle history (title brands) – reside in a single location?	
• Does the State or its agents validate every VIN with a verification software application?	
Questions – Applicable Guidelines for the Vehicle Data System	
• Does the vehicle system provide title information data to the National Motor Vehicle Title Information System at least daily?	
Questions – Vehicle System Data Dictionary	
•	